

MATERIAL SAFETY DATA SHEET (MSDS)



Section I - Product / Company Information

Product Name	UNIOIL GMAXSG 20W-50	
Product Code	URC - 0010	
Company Name	Unioil Petroleum Philippines, Incorporated	
Address	2701-A West Tower, PSE Centre, Exchange Road, Ortigas Centre, Pasig City, Philippines	
Manufacturer	Union Refinery Corporation	
Address	Rubbermaster Road, Bo. Lingunan, Valenzuela, Metro Manila	
Chemical Family	Petroleum Hydrocarbons with Additives	
Product Type	Engine Oil	
Emergency Phone Number	293-03-78	
NFPA Hazard Identification	Degree of Hazard	Hazard Ratings
	Health = 1 Fire = 1 Reactivity = 0	0 = Least 1 = Slight 2 = Moderate 3 = High 4 = Extreme

Section II - Composition / Information on Ingredients

Substance/Mixture	Mixture	
Component	Typical Compound	Weight %
Lubricating Base Oil	Heavy Paraffin, C ₂₀₋₅₀	>85
Additives	Alkyldithiophosphate (<1%)	<15

Hazardous Ingredients	The composition of this product is proprietary information. In general, the product does not contain any component that may be a significant health and safety as long as normal precautions in handling petroleum products are observed and good standards of industrial and personal hygiene are maintain. However, in the event of a medical emergency, compositional information will be provided to the attending physician.
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Section III - Hazards Identification

Primary Entry routes	Eye contact, skin contact/adsorption, inhalation of vapors
Target Organs	Eyes, skin, respiratory system
Eye Contact	Slightly irritating on direct contact

Skin Contact	Low order of toxicity. However, like other petroleum-based products, prolonged or repeated contact may result in the defatting of skin, leading to irritation and possibly dermatitis
Inhalation	Negligible hazard at ambient temperature (-18 to 38°C; 0 to 100°F). However, if this product is overheated, especially in the presence of water, hydrogen sulfide may be released; this can cause respiratory collapse, coma and death without necessarily any warning odor being sensed. Furthermore, overexposure to oil mists may result in droplet deposition, oil granuloma formation, inflammation and increased incidence of infection.
Ingestion	Minimal toxicity
Workplace exposure limits	Due to oil-based components of the product, URC recommends control of exposure to oil mist or vapors at 5mg/m ³ or less

Section IV - First Aid Measures

Eye Contact	Immediately flush eyes with large amount of water for at least 15 minutes or until irritation subsides. If irritation persists, get prompt medical attention
Skin Contact	Immediately flush with large amount of water, use soap if available. Removed contaminated clothing, including shoes and launder before reuse.
Inhalation	This product has low vapor pressure and is not expected to present an inhalation problem at ambient temperature. However, if overexposed to oil mist, use proper respiratory protection, immediately remove the affected person immediately to fresh air. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention
Ingestion	If swallowed. DO NOT induce vomiting. If individual is conscious, give milk or water to dilute stomach contents. Keep warm and quiet. Get immediate medical attention. DO NOT attempt to give anything by mouth to an unconscious person.

Section V - Fire Fighting Measures

Flash Point, COC, °C	200 min
Extinguishing Media	In case of fire, use foam, carbon dioxide or dry chemical extinguishers
Special Fire-fighting Procedures	Water jets should not be used directly on igniting products. Avoid spraying water directly into storage containers due to danger of over-boil. However, water may be used to cool exposed containers, structures and equipment adjacent to fire. Respiratory and eye protection for fire-fighting personnel.
Decomposition Products under Fire Conditions	Fumes, smoke, oxides of sulfur, nitrogen, carbon and other toxic gases may be formed



Section VI - Accidental Release Measures

Land Spill	Taking normal safety precaution, eliminate sources of ignition. Prevent additional discharge of material, if possible to do so without hazard. For small spills implement cleanup procedures. For large spills implement cleanup procedures and, if in public area, keep public away and advise authorities. Prevent liquid from entering sewers, water sources or low areas. Contain spill liquid with sand or earth. Recover by pumping or with suitable absorbent if liquid is too viscous for pumping, scrape up. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations
Water Spill	Use booms to confine spill immediately. Remove from water surface by skimming or with suitable adsorbents. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in non-confined water. Consult expert on disposal of recovered material and ensure conformity to local regulations

Section VII - Handling and Storage

Handling Procedures	Keep away from potential sources of ignition. Open container in a well-ventilated area. Avoid breathing vapors. Keep containers closed when not in use. Wash thoroughly after handling. "Empty" containers retain product residue (liquid or vapor) can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat, flame, sparks, static electricity or other sources of ignition that may explode and cause death or injury. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioned, or properly disposed of.
Storage Procedures	Do not store near potential sources of ignition. Store in a well-ventilated area. Odorous and toxic fumes may form from the decomposition of this product if stored at temperatures in excess of 60°C for extended period of time or heat sources in excess of 70 °C are used.

Section VIII - Exposure Control / Personal Protection

Ventilation Procedures	The use of local exhaust is recommended to control mists or vapors. Additional ventilation or exhaust may be required to maintain air concentrations below exposure limits.
Gloves Protection	Use chemical resistant gloves.
Eye Protection	Where contact may occur, wear safety glasses with side shields
Respiratory Protection	Use NIOSH/MSHA approved full-face respirator with a combination organic vapor and high efficiency filter cartridge if the recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for poorly ventilated areas and for large spill cleanup sites.



Clothing recommendation	Wear either a chemical protective suit or apron when potential for contact with material exists. Use neoprene or nitrile rubber boots when necessary to avoid contamination of shoes. Do not wear rings, watches or similar apparel that could enter the material and cause skin reaction.
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Section IX - Physical and Chemical Properties

Density @ 15°C, g/cm ³	0.8841
Water Solubility	Insoluble
Odor	Characteristics of petroleum products
Appearance	Clear
Viscosity @ 40°C, cSt	147.63
Viscosity @ 100°C, cSt	17.40

Section X - Stability and Reactivity

Stability	This product is stable and hazardous polymerization will not occur. However, the product should not be heated above 70 °C to avoid possible release of highly toxic hydrogen sulfide and odorous alkyl mercaptans
Incompatibility	Strong oxidizing agents
Polymerization	Not applicable
Hazardous Decomposition Products	Hydrogen sulfide (toxic)

Section XI - Disposal Considerations

Waster Disposal	Material discarded is expected to be hazardous waste due to toxicity. Waste management should be in compliance with local and national regulations
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